

REMARKS

Claims 1-20 remain pending in this application. Of these claims, claims 1, 4, 6, 8, 9, 11 and 15-17 stand rejected under 35 USC §102(b) as being anticipated by Tassle et al. and claims 5 and 7 stand rejected under 35 USC §103(a) as being unpatentable over Tassle et al.

In view of the following remarks, these rejections are traversed, and reconsideration of this application is respectfully requested.

Claims 2, 3, 10 and 12-14 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 18-20 have been allowed. Applicant acknowledges and appreciates the indication of allowable subject matter.

Claims 1, 4, 5, 9 and 18 have been amended above to correct informal matters. These amendments do not go to the patentability of the claims.

Applicant's invention is a protocol selection matrix adapter that interfaces a host computer with multiple in-vehicle networks. The protocol selection matrix adapter allows diagnostic signals from the vehicle networks that may use different protocols to be received and deciphered by the host computer. The protocol selection matrix adapter can simultaneously and automatically interface several in-vehicle networks to the host computer that may use different protocols. Examples of some protocols that the protocol selection matrix adapter supports are given on page 6 of the specification.

U.S. Patent No. 4,714,923 issued to Tassle et al. discloses a data communications system that covers a predetermined large geographic area divided into

non-overlapping zones. The communications system includes a host computer 102, a general communications controller 104 and multiple channel communications modules 106, 108, 110 and 112 that are located throughout the geographical area (column 3, line 5). The channel communication modules 106, 108, 110 and 112 include transmitters 114, 120 and 124 and receivers 116, 118, 122, 126, and 128 that are in communication with portable radios 130, 132 and 134. Each zone of the communications system is covered by and assigned one of the transmitters 114, 120, 124 (column 3, lines 17-20).

As the Examiner is aware, in order for a claim to be anticipated each and every element in the claim must be found, either expressly or inherently described, in a single prior art reference (MPEP 2131).

Independent claim 1 defines a protocol selection matrix adapter for simultaneously interfacing a host computer to multiple in-vehicle networks on a vehicle, where the networks may be using different protocols. Tassle et al. does not teach or describe, either expressly or inherently, any of a vehicle, a vehicle network or a vehicle network protocol. Therefore, Tassle et al. does not teach a protocol selection matrix adapter for interfacing a host computer to a vehicle network as claimed by Applicant. The channel communication modules 106-112 are not protocols, are not vehicle networks, and are not even part of a single unit, which Applicant's protocol selection matrix adapter clearly is.

Applicant submits that the channel communication modules 106-112 are separate units that are provided in different zones in a large geographical area to provide a desired communications coverage. Therefore, Applicant respectfully submits

that Tassle et al. cannot anticipate Applicant's independent claim 1 because Tassle et al. fails to describe any of these elements of Applicant's independent claim 1.

Further, independent claim 1 includes a universal asynchronous receiver transmitter (UART) decoder circuit for decoding UART protocols. Tassle et al. does not teach or describe, either expressly or inherently, a UART decoder circuit. Therefore, Applicant respectfully submits that Tassle et al. also cannot anticipate Applicant's independent claim 1 for this reason.

Applicant's independent claim 1 also includes a protocol central processing unit (CPU) circuit that provides various functions. The Examiner states on page 2 of the Office Action that the claimed CPU circuit is represented in Tassle et al. as microprocessor 920 in figure 13. The microprocessor 920 is in the portable radios 130, 132 and 134 and has nothing to do with a CPU circuit in a protocol selection matrix adapter for interfacing a host computer to multiple in-vehicle networks using different protocols. Therefore, Applicant respectfully submits that Tassle et al. also cannot anticipate Applicant's independent claim 1 for this reason.

Moreover, Tassle et al. does not use multiple protocols in the communications system. Each of the channel communication modules and the portable radios use the same protocol.

Dependent claim 4 states that one of the transceiver circuits is a controller area network (CAN) transceiver circuit for a CAN protocol interface. Dependent claim 6 states that one of the transceiver circuits is a standard corporate protocol (SCP) transceiver circuit for providing a SCP protocol interface. Dependent claim 8 states that one of the transceiver circuits is a UART based protocol transceiver circuit. Dependent

claim 9 states that one of the transceiver circuits is a data communications link (DCL) transceiver circuit. Dependent claim 11 states that one of the transceiver circuits is a diagnostic data link (DDL) UART transceiver circuit. Applicant submits that Tassle et al. does not disclose any of these protocols, and therefore can anticipate any of these dependent claims either.

With respect to the §103(a) rejection of dependent claims 5 and 7, Applicant submits that the Examiner has not established a prima facie case of obviousness because Tassle et al. does not teach or suggest any of the elements in those claims.

It is respectfully requested that the § 102(b) and §103(a) rejections be withdrawn.

It is now believed that this application is in condition for allowance. If the Examiner believes that personal contact with Applicant's representative would expedite prosecution of this application, he is invited to call the undersigned at his convenience.

Respectfully submitted,

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Dated: 12/20/04

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